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NES-IV-USA

HOW TO PLAY

SILENT SERVICE™

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WELCOME TO THE WORLD OF ULTRA!

You're now the proud owner of ULTRA's authentic version of Silent Service for the Nintendo Entertainment System. Silent Service was originally designed and developed by MicroProse Software Inc. We suggest that you read the following instructions thoroughly before diving below the waters of the bloody South Pacific.

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FIND 'EM, CHASE 'EM, SINK 'EM!

Just above the beat of your heart, you hear hostile propellers churning through calm seas. At any second the first depth charge will explode. Your watch ticks. Sweat rolls into your eyes. As the enemy's sonar ping intensifies, you hold your breath, realizing that the pressure of an unmerciful sea is all around you.

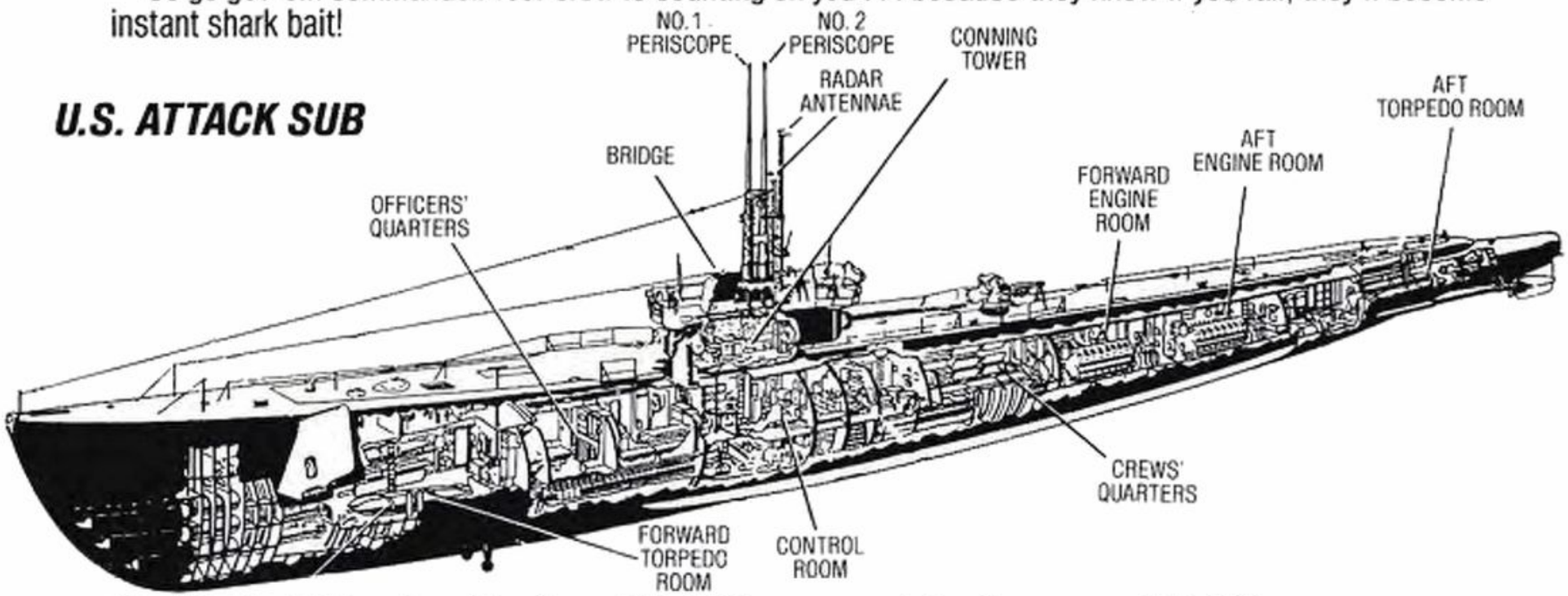
Such is your life as a commander in the elite Silent Service Force, a detailed simulation of World War II submarine missions in the bloody South Pacific.

From the moment you dive into action, you'll be confronted with the same information, problems and resources available to an actual sub captain. Your primary mission will be to take on the Japanese Navy in their home waters and to neutralize the Japanese Merchant Marine.

With a limited number of torpedoes and fuel, your goal is to sink a maximum tonnage of enemy ships and bring your sub safely back to base. Your overall evaluation from Fleet Command will be based on the number and types of ships you sink.

So go get 'em commander. Your crew is counting on you . . . because they know if you fail, they'll become instant shark bait!

U.S. ATTACK SUB



The U.S. Fleet Submarine of the Second World War was an outstanding weapon. With 200 tons of diesel fuel and a cruising range of 12,000 miles, no area of the Pacific was safe for enemy shipping.

MISSION OPTIONS There are three types of scenarios. "Torpedo/Gun Practice" places you outside the American base at Midway Island. Four old cargo ships are anchored there as torpedo and gunnery practice targets. "Convoy Actions" recreate a variety of actual submarine attacks on a convoy. "War Patrols" allow you to command an entire patrol, putting out to sea from submarine bases at Midway, Brisbane or Fremantle, continuing through a number of convoy actions, and concluding with a victorious return. (Or sunken dreams!)

To select your mission option, press the Control Pad Up or Down and lock in your decision with the A Button.

SKILL LEVELS There are four skill levels: MIDSHIPMAN (beginner), LIEUTENANT, COMMANDER (designed to be the most historically correct), and CAPTAIN (expert). The skill level effects the accuracy of torpedo runs, damage from depth charge attacks, and the skill of enemy lookouts and sonar operators.

Lock in your skill level selection by pressing the A Button.

COMBAT DIFFICULTY LEVELS You can customize your mission with various "combat levels." Each level introduces an element that's more realistic and more difficult. They include:

LIMITED VISIBILITY. If this level is selected, enemy ships which are beyond radar/sonar range won't appear on the map displays.

CONVOY ZIG-ZAGS. If this level is selected, enemy convoys will "zig-zag" (change course) at regular intervals. If this level is not selected, cargo ships will steam straight ahead unless they are attacked by torpedoes or encounter land masses.

DUD TORPEDOES. Some of your torpedoes may be "lemons" if you select Dud Torpedoes instead of No Dud Torpedoes. Dud torpedoes may hit the enemy but will not explode.

PORT REPAIRS ONLY. If this level is selected (instead of Repairs Under Fire), repairs will no longer occur automatically while in battle or on patrol.

EXPERT DESTROYERS. If this level is selected (instead of Standard Destroyers), certain enemy convoys will be escorted by "expert" destroyers. These escorts are more persistent and have better trained sonar operators.

CONVOY SEARCH. If this level is selected (instead of Close Convoys), convoys will not always appear within radar range. You'll need to search them out. Far off convoys are best sighted by performing a 360 degree periscope/binocular sweep of the horizon.

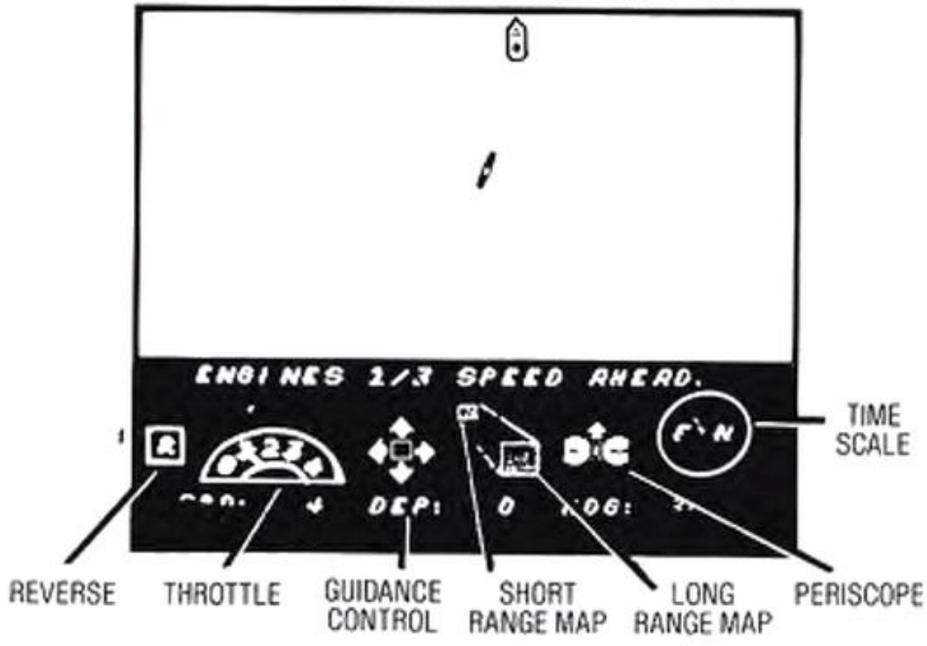
To choose your levels, press the Control Pad Up or Down, then make your selections by pressing the A Button.

OVERALL DIFFICULTY The skill level and difficulty levels you select combine to produce an overall difficulty factor from 1 to 9. This difficulty factor and the tonnage you sink will determine your ranking in the "Submariner's Hall of Fame" at the conclusion of your mission.

TERMINOLOGY

Port: The left side of the ship. **Starboard:** The right side of the ship. **Bearing:** The direction you are looking. **Heading:** The direction your ship is going.

SUBMARINE CONTROLS



To make a split-second decision, move the arrow to the desired control and press the A Button.

CONTROL FUNCTIONS

Raise or Lower Periscope: This command raises scope if it's down, and lowers it if it's up. It also sets the visual bearing to be the same as the sub's heading. You can use the periscope, in daylight only, down to a maximum depth of 44 feet.

Throttle (Speed): Choose from Dead Stop (0) to Full Speed Ahead (4).

Reverse: Use to reverse engines for an emergency escape. To change speed while in reverse, adjust the Throttle, then select Reverse again.

Guidance Control: To dive, move the arrow onto the down pointer of the Guidance Control. To surface, move the arrow onto the up pointer of the Guidance Control.

For left rudder, move the arrow onto the left pointer of the Guidance Control. This turns the sub toward the left (port). If looking at the Map screen, you will see the sub turn counterclockwise.

For right rudder, move the arrow onto the right pointer of the Guidance Control. This turns the sub toward the right (starboard). If looking at the Map screen, you will see the sub turn clockwise.

To cancel all dive and turn commands, move the arrow to the center of the Guidance Control and press the A Button.

You can also blow emergency tanks by holding down the B Button and pressing the A Button on the player 2 controller. This can halt an otherwise fatal dive, and usually brings your sub to the surface. You may perform this only once per engagement.

TIME SCALING DEFINED

In order to ensure accuracy, all ship movements, sightings, torpedo runs and dive rates are recalculated every two seconds of simulated game time. However, under most conditions it is desirable to speed up the action somewhat.

Normally the simulation proceeds at four times real-time: One minute of game time takes 15 seconds. If the "F" is selected on the clock, the time scale is doubled. Repeated pressing will continue to increase the Time Scale up to a maximum of 32 times real time (i.e. one hour of game time will take 2 minutes at time scale 8).

To increase the Time Scale, move the arrow to the "F" on the Time Scale and press the A Button. Each subsequent key press doubles the speed, to a maximum of 32 times real time speed (three key presses).

To return to the normal Time Scale, move the arrow to the "N" on the Time Scale and press the A Button. Note: You automatically return to normal time when detected by the enemy or when you fire a torpedo or the deck gun.

THE CONNING TOWER MENU SCREEN

The Conning Tower screen acts as a menu screen. From this screen, you may select any of the four detailed battle station screens: Instruments and Gauges, Maps and Charts, Periscope/Binoculars, and Damage Reports. (See pages 10-13). Use the arrow to position the captain at the desired battle station, then press the A Button. Moving the arrow to the Map Table, for example, moves the captain to the table. Press the A Button and the Map screen will appear.

You may also select two special functions from this screen. If you are playing a Training or Convoy Action scenario, the "End of Game" function will end your mission. If you are playing a War Patrol scenario, the "Continue Patrol" function ends the current convoy battle and returns you to the patrolling screen. You cannot end the battle if you are being tracked by enemy escorts, have torpedoes active, or if an enemy ship is still sinking.

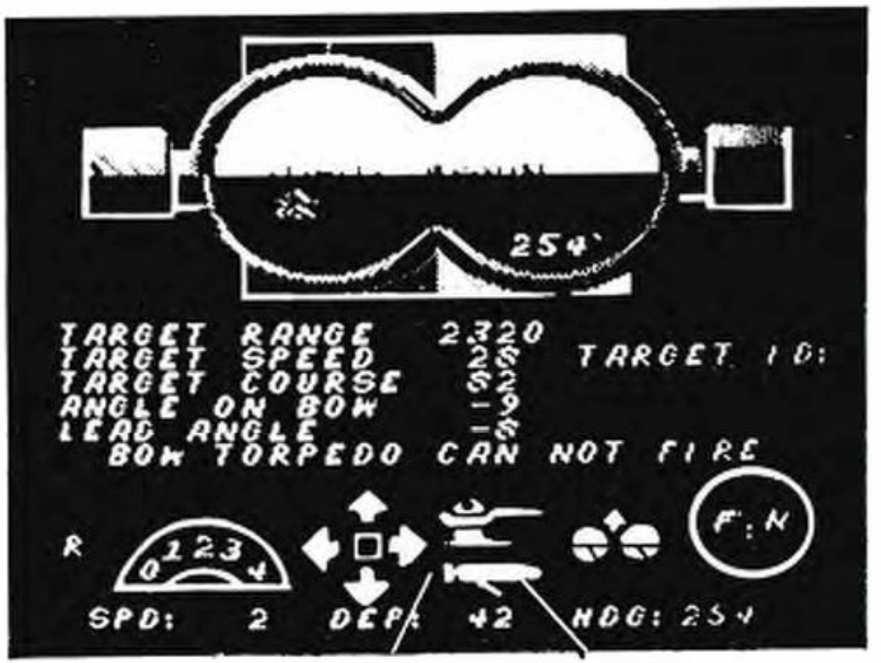
The "Quartermaster's Log" option (located at the bottom right corner of the command compartment) is used to review your accomplishments during the current patrol.

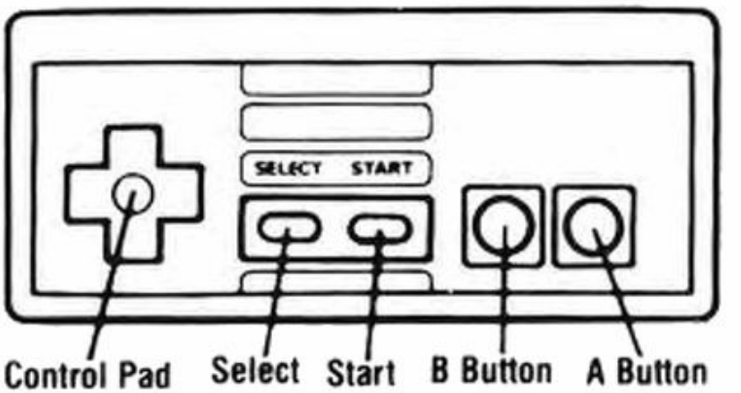
When you are at the Conning Tower screen, the simulation is paused. Note: Some selections are unavailable under certain conditions.

To choose the Conning Tower Menu, press the Select Button. Once in the Conning Tower, make selections by moving the arrow to different areas (i.e. the periscope, the map, etc.) and then press the A Button.

COMBAT CONTROLS

These controls are at your command when at Periscope/Binocular Battle Stations (see p. 12). Once again, move the arrow to your selection and press the A Button.





ATTACK CONTROLS

To identify the target under the crosshairs on the periscope/binoculars, move the arrow to the Target ID.

To fire a torpedo at the target under the white crosshairs, move the arrow onto the Torpedo Firing Control. Bow or aft tubes will be selected automatically, depending on which ones face the target.

To fire the four-inch deck gun at the target under the white crosshairs, move the arrow onto the Deck Gun Firing Control. The gun may be fired only when your sub is on the surface.

Note: Four torpedoes and gun shells (total) may be active at any one time.

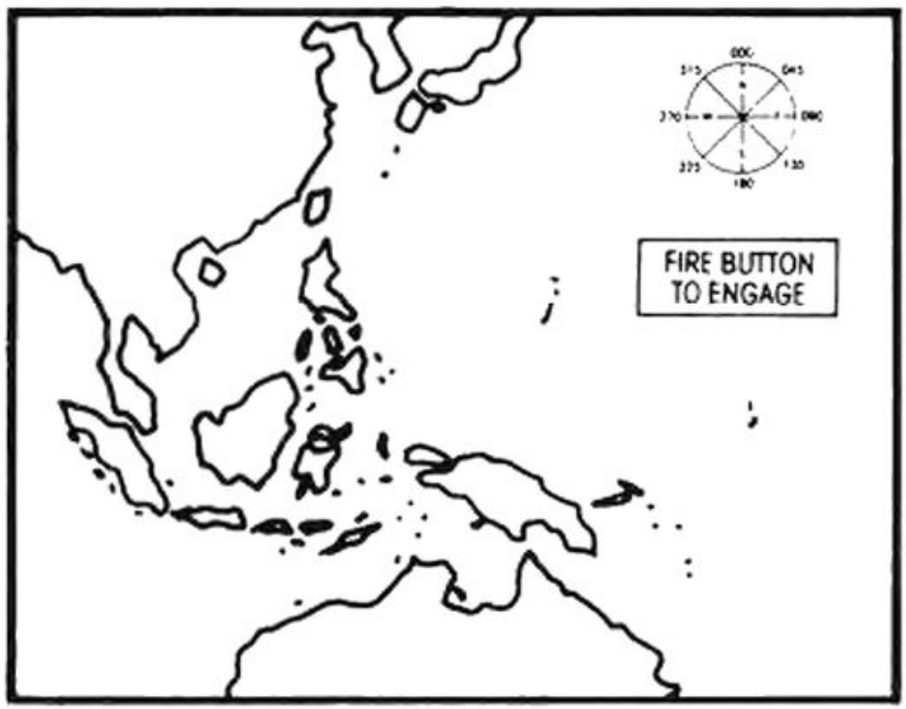
To increase gun deflection, press the Player 2 Control Pad UP. Each additional press adds 25 more yards to the deflection. You want to increase deflection when the target is moving away from you. To decrease the gun deflection, press the Player 2 Control Pad DOWN. Each additional press subtracts 25 yards from the deflection. You want to decrease deflection when the target is moving toward you. (See DECK GUN on p.19)

To rotate the periscope view left, press the Player 2 Control Pad LEFT. To rotate the periscope view right, press the Player 2 Control Pad RIGHT. (Rotating the view changes its bearing.)

To release debris and oil, use the Player 2 Control Pad and hold down the A Button while you press the B Button. The debris will rise to the surface and may convince the enemy your sub has sunk. You may release debris only once per engagement.

BATTLE STATION SCREENS

Silent Service contains multiple Battle Station screens. On each screen different information is available and different commands can be entered. The battle stations represent the main locations from which the captain manages the battle. Not all controls are operable from all screens. Be sure to note what controls are available on each screen.



WAR PATROL NAVIGATION MAPS BATTLE STATION

(War Patrol scenarios only)

When you select a War Patrol scenario you start out on this screen, which displays a map of the South Pacific Ocean. You are free to explore any area of the map. Your ship is a tiny white dot near the starting port of Fremantle, Brisbane or Midway. The patrol screen simulates the time required to proceed from your base to enemy-controlled waters, as well as the patrolling activity between engagements. (A typical patrol lasted up to two months.)

Moving on the War Patrol map: Using the Control Pad, move the arrow in the direction you wish to go. Time moves quickly while patrolling. The ocean changes from light to dark to represent day and night.

Finding the Enemy: When the ocean or screen border turns red, you've spotted a convoy. Press the A Button to exit from patrol if you want to engage in battle. Note: Enemy ships are generally found along the heavily travelled convoy routes and close to land. Valuable tanker and troop ship convoys are more likely to be found near Japan.

Getting Home: The submarine bases at Midway Island, Fremantle and Brisbane are indicated by flashing dots. When you have reached your base and the ocean turns green, you can return to port. Press the A Button to end the patrol and record your score in the Submariner's Hall of Fame.

Important Note: No other controls function on the patrol navigation screen. To make other controls work you must exit the War Patrol.

INSTRUMENTS AND GAUGES BATTLE STATION

A. Battery Level — Indicates electricity remaining in the battery. Recharge by surfacing. A fully charged battery allows one hour of high-speed maneuvering underwater and 5 to 6 hours at slow speed. If your battery is drained, you'll be unable to move underwater.

B. Battery Charge Light

C. Battery Drain Light

D. Speed — Maximum surface speed is 20 knots. Maximum submerged speed is 10 knots.

E. Depth — Zero means sub is on the surface. Maximum diving level is 500 feet.

F. Periscope Indicator — Green means it's up, black means it's down.

G. Torpedo Ready Indicator — Green means forward and aft torpedo tubes are ready. Black means they're empty. Torpedo reloading takes 10 minutes per tube. The number under each column indicates how many torpedoes remain in addition to those already in the tube. The number alongside shows the number of deck gun shells remaining.

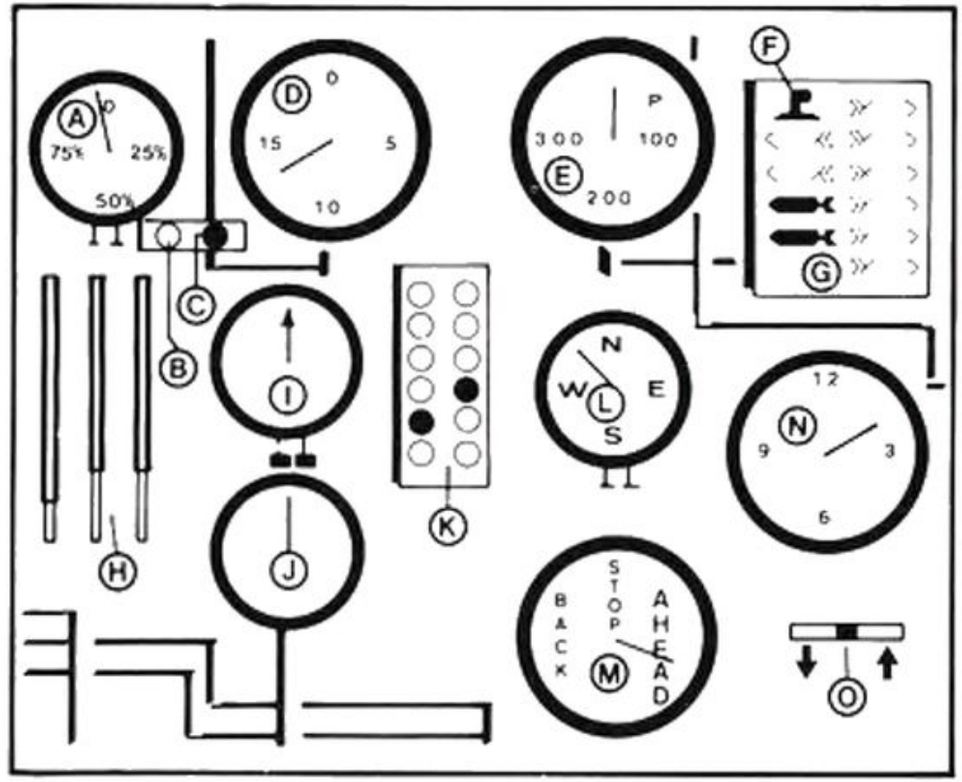
H. Fuel Levels — Shows the amount of fuel in the three main tanks.

I. Depth Under The Keel — Depth from sub to ocean's bottom. When gauge reads zero you'll run aground.

K. Christmas Tree — Indicates status of hull openings. Green means closed, red means open. Hull openings close automatically when you dive.

L. Compass — Indicates direction sub is heading.

N. Clock — Shows time of day. Dusk in the Pacific is from 7:00 P.M. (Hour 19) to 8:00 P.M. (Hour 20). Dawn is from 5:00 A.M. to 6:00 A.M.



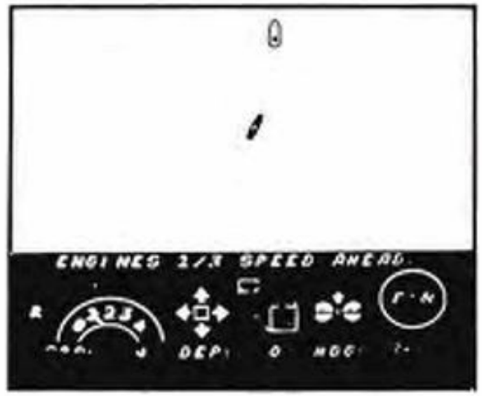
J. Water Temperature — When the dial is in the blue section, it indicates the submarine is below a thermal gradient layer. Note: Hiding below a thermal gradient layer can provide extra protection against the enemy's counter attack.

M. Throttle — 0-4 settings: All Stop, 1/3, 2/3, Full Speed and Flank (reverse) Speed.

O. Dive Bubble — Shows whether the sub is diving or surfacing. The bottom line displays your current speed (in knots), depth (in feet) and heading (in degrees).

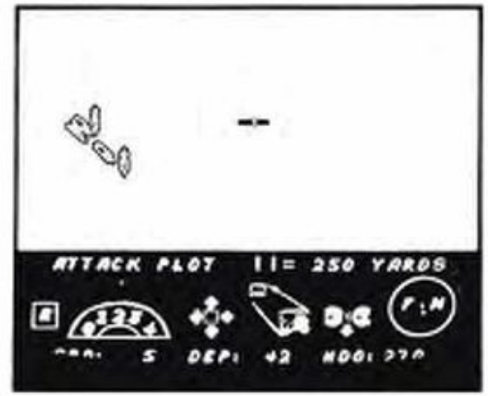
MAPS AND CHARTS BATTLE STATION

SOUTH PACIFIC MAP



PATROL AREA MAP

NAVIGATION MAP



ATTACK PLOT MAP

The maps and charts screen displays information available from the navigator and the tracking party. Map information, visual sightings, radar and sonar are combined on this screen to show the location of your submarine, torpedoes and all known enemy ships. Remember that your submarine is represented by a white dot. Torpedoes and enemy ships are black dots, and green areas represent land masses and islands.

Note: Sometimes there are enemy ships out there that you have not yet detected. These undetected ships do NOT appear on the map. Your lookouts aren't always reliable - it's wise to leave the Maps Battle Station and look around the horizon with the periscope/binoculars.

If more ships and torpedoes are active than the tracking party can handle, the most distant objects may be dropped from the map.

Zoom: You may enlarge or shrink the scale of the map to any of four levels of detail by moving the arrow onto the Small Scale or Large Scale Map and pressing the A Button. The initial map shows the entire South Pacific. The Patrol Area Map shows a 500 by 300 mile area. Zoom again and you'll see the Navigation Map, which shows 60 by 40 miles. The most detailed map is the Attack Plot Map, which shows an area of 8 miles by 5 miles. Ships are displayed on the Attack Plot.

NOTE: When the screen begins flashing, the enemy is either within range or you may have wandered off the map. You'll also notice, as you patrol the seas, that the map color changes from dark to light. This represents the passing of days and nights.

Controls Available: All Submarine and Time and Scale controls, plus "Release Debris"

PERISCOPE/BINOCULARS BATTLE STATION

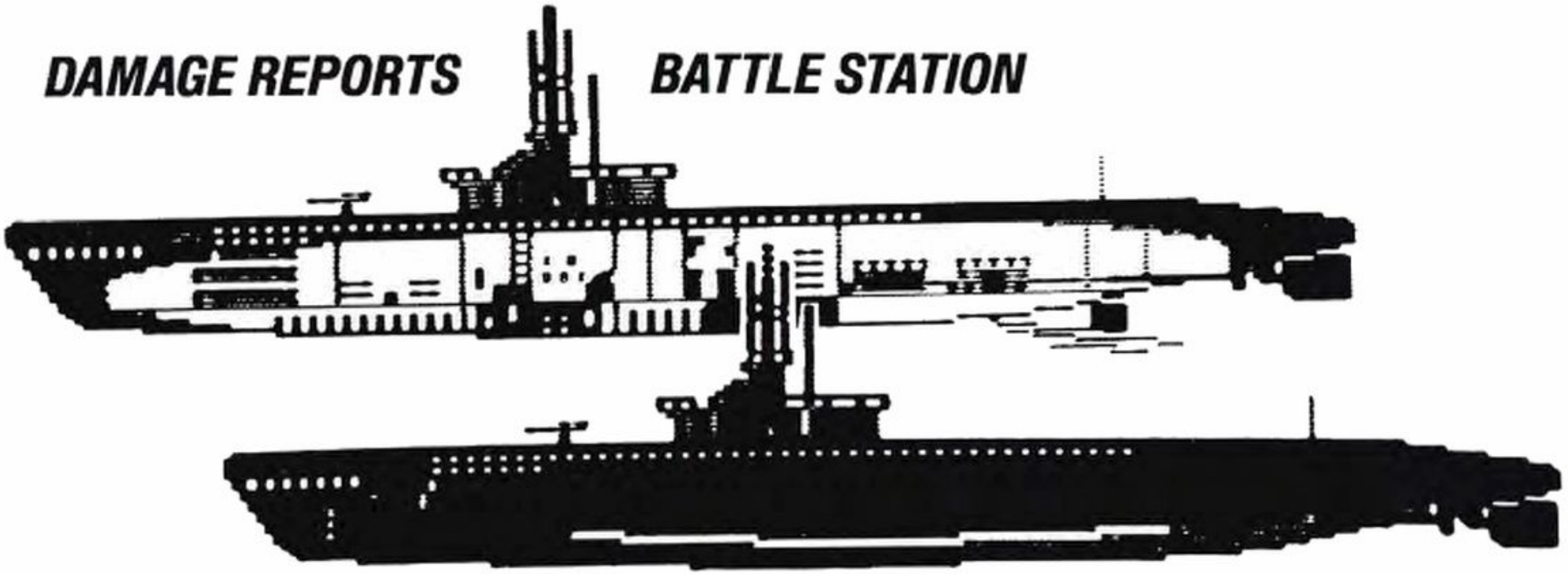
Controls Available: All Combat controls, Faster and Normal Time.

This screen displays the view through the attack periscope during daylight/dusk/dawn, and the view from the bridge's Target Bearing Transmitter Binoculars at night. The viewing area shows an enlarged image of visible ships and land. This screen may be selected when the sub is on the surface, or at periscope depth (44 feet or less) during daylight hours.

Torpedo Data Computer: When the crosshairs turn white the Torpedo Data Computer is activated and target tracking is displayed. The TDC displays the range to the target, the target's speed and the target's course. To fire a torpedo, fire the deck gun or request information, move the arrow onto the appropriate control and press the A Button.

DAMAGE REPORTS

BATTLE STATION



This screen indicates the nature of any damage to the submarine. Damage may be caused by depth charge attacks or enemy gunfire. Types of damage include:

Bow/Aft Torpedo Damage: Torpedo tube doors have been damaged. The torpedoes will not fire.

Periscope Damage: The periscope housing has been damaged. The periscope cannot be lowered or raised.

Dive Plane Damage: The bow and stern dive planes have been damaged. The submarine will only dive or surface at half its normal rate.

Fuel Leaking: The external fuel tanks are leaking. Fuel will be consumed at twice the normal rate. In addition, fuel rising to the surface will make the submarine easier to detect by enemy destroyers.

Engine Damage: The main diesel engines are damaged. Surface speeds are reduced by half.

Machinery Damage: Internal pumps and engines are damaged. The extra noise makes the enemy's sonar tracking easier.

Battery Damage: Batteries are used up at twice the normal rate when submerged. If the "Port Repairs Only" combat level is not selected, repairs are attempted by the crew automatically.

Water Damage: If your sub is taking on water, the leakage rate is indicated in gallons per second (GPS). Leakage will often cause your sub to descend, although the dive planes may be able to counter-act the dive. This information is provided in the top right hand side of the Damage Reports screen.

MESSAGES AND SOUNDS

You may receive messages at any time from various members of the crew. They will appear on the top line of the screen. You will also hear the sounds of your own engines, nearby ships and torpedoes.

SONAR REPORTS DESTROYERS CLOSING ("ping" sound)

SONAR REPORTS DEPTH CHARGES DROPPED ("splash" sound)

DEPTH CHARGES EXPLODING! (explosion sound)

LOOKOUTS REPORT DESTROYERS FIRING (gun sound)

SHELL HIT! SUB DAMAGED (whistling explosion sound)

BOW (AFT) TORPEDO FIRED! 135′ TRACK (torpedo launch, torpedo motor sound)

DECK GUN FIRED! (gun fire sound)

SONAR REPORTS DISTANT EXPLOSIONS (distant explosion sound)

WARNING: TEST DEPTH EXCEEDED (hull creaking sound—check the Damage Reports screen!)

WE HAVE RUN AGROUND! (grinding sound)

REPAIRS COMPLETED (check the Damage Reports screen)

BLOW EMERGENCY TANK! (alarm sound)

COLLISION! ABANDON SHIP! (grinding sound)

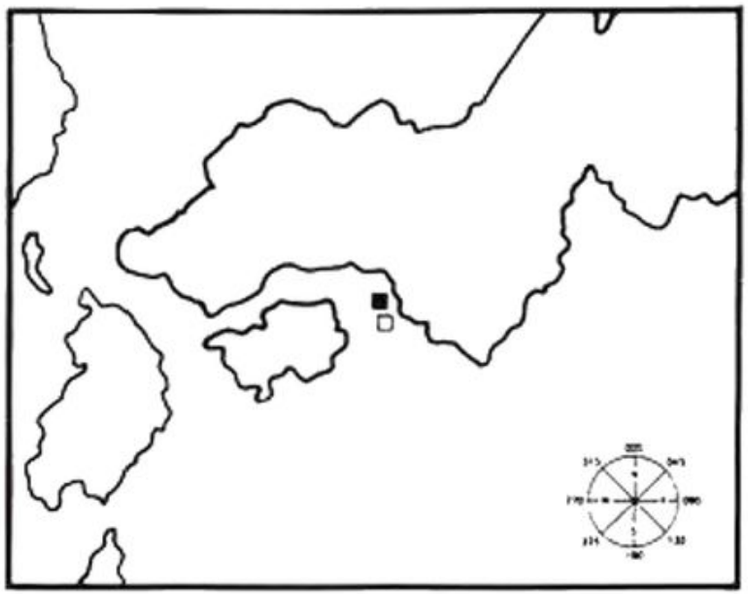
COMPLETING YOUR MISSION

Convoy Action missions end when you select the "End of Game" option. War Patrol missions end when you return to one of your bases. Either mission category ends if you are sunk or beached. In all cases you will see a screen displaying all ships which you have sunk and your final rank.

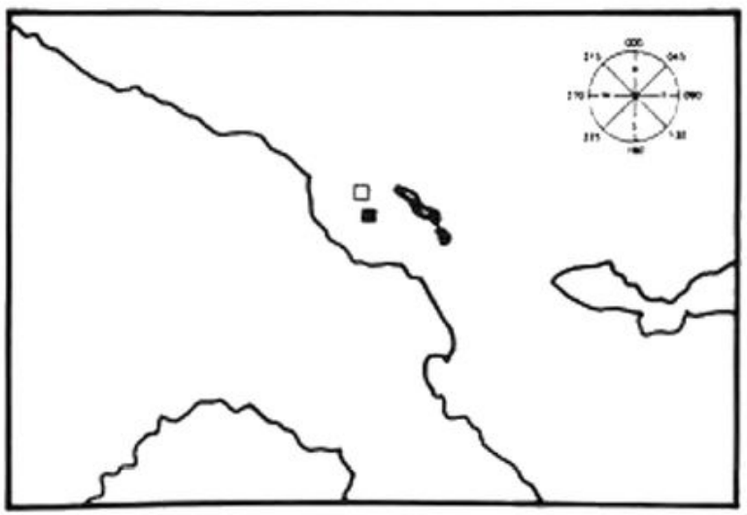
All players will rank at least Ensign. Higher levels are Lieutenant JG, Lieutenant, Lieutenant Commander, Commander, Captain, Vice-Admiral, Admiral, Fleet Admiral and ultimately WGSC (World's Greatest Submarine Captain)!

CONVOY ACTION SCENARIOS

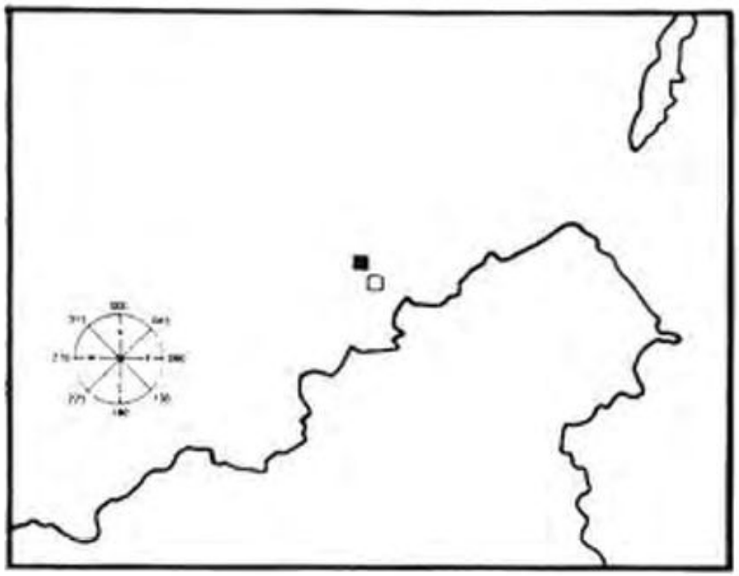
Convoy action scenarios are shorter missions which place you in specific historical situations. They are useful for becoming acquainted with the features of this simulation, practicing specific tactics or when time is short.



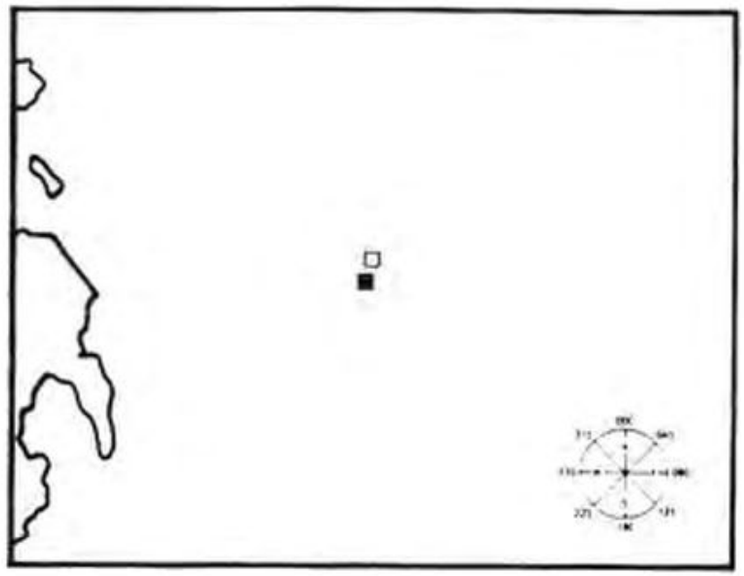
PLUNGER IN THE INLAND SEA
(Lt. Commander D.C. White)
Day/Submerged
Jan. 18, 1942, Latitude 33-30 N, Longitude 135-00 E.
The USS Plunger, patrolling off the southern coast of Japan, sights an escorted cargo ship steaming east at high speed. This scenario gives you the opportunity to set up a torpedo firing solution against a moving ship. Remember that even though the Torpedo Data Computer calculates the correct lead gyro angle to hit the target, it is often a good idea to fire a spread of torpedoes in case your target changes course unexpectedly.



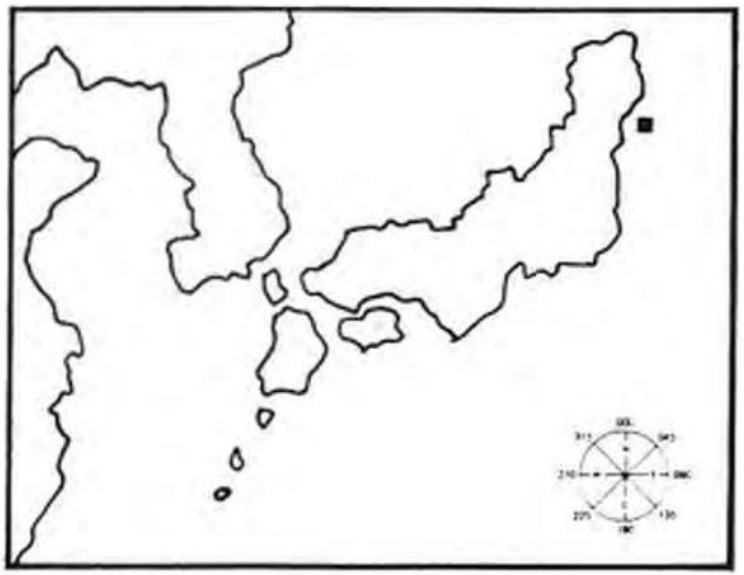
WAHOO VS. CONVOY (Lt. Commander "Mush" Morton)
Day/Surface
Jan. 26, 1943, Latitude 2-37 N, Longitude 139-42 E.
Off the New Guinea coast, USS Wahoo sights a small Japanese convoy. The situation is a submariner's dream: an unescorted convoy including a troop ship and a large oil tanker. However, the convoy has radioed for help and a destroyer is on the way! Your objective is to strike quickly and cause as much damage as possible. Be sure to use your aft torpedoes if your bow tubes are empty.



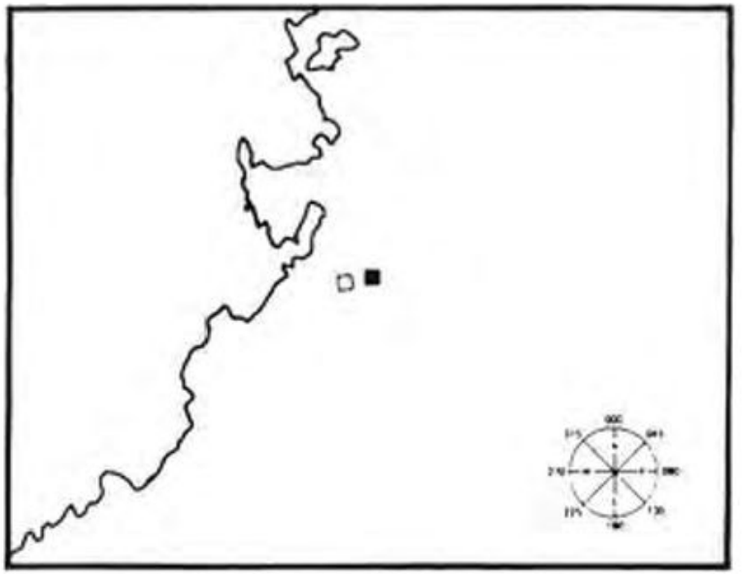
HAMMERHEAD AT BORNEO
(Commander J.C. Martin)
Night/Radar
October 1, 1944, Latitude 6-30 N,
Longitude 116-11 E.
SJ radar picks up a large escorted convoy as the USS Hammerhead patrols the northern coast of Borneo. The tanker, one of Japan's dwindling handful remaining at this stage of the war, should be your primary target. This scenario introduces night combat against an escorted convoy. You should take care to avoid being spotted as long as possible. Use moderate speeds, keep a minimum profile toward the escort, and try to time your attack so that the escort is on the other side of the convoy.



SEARAVEN AT TOAGEL MLINGUI
(Commander H. Cassedy)
January 13, 1943, Latitude 9-12 N,
Longitude 130-38 E.
Somewhere between the Philippine Islands and the Japanese naval base at Truk Lagoon, USS Searaven comes across a northbound convoy. You are in a bad position: astern of the convoy in daylight.

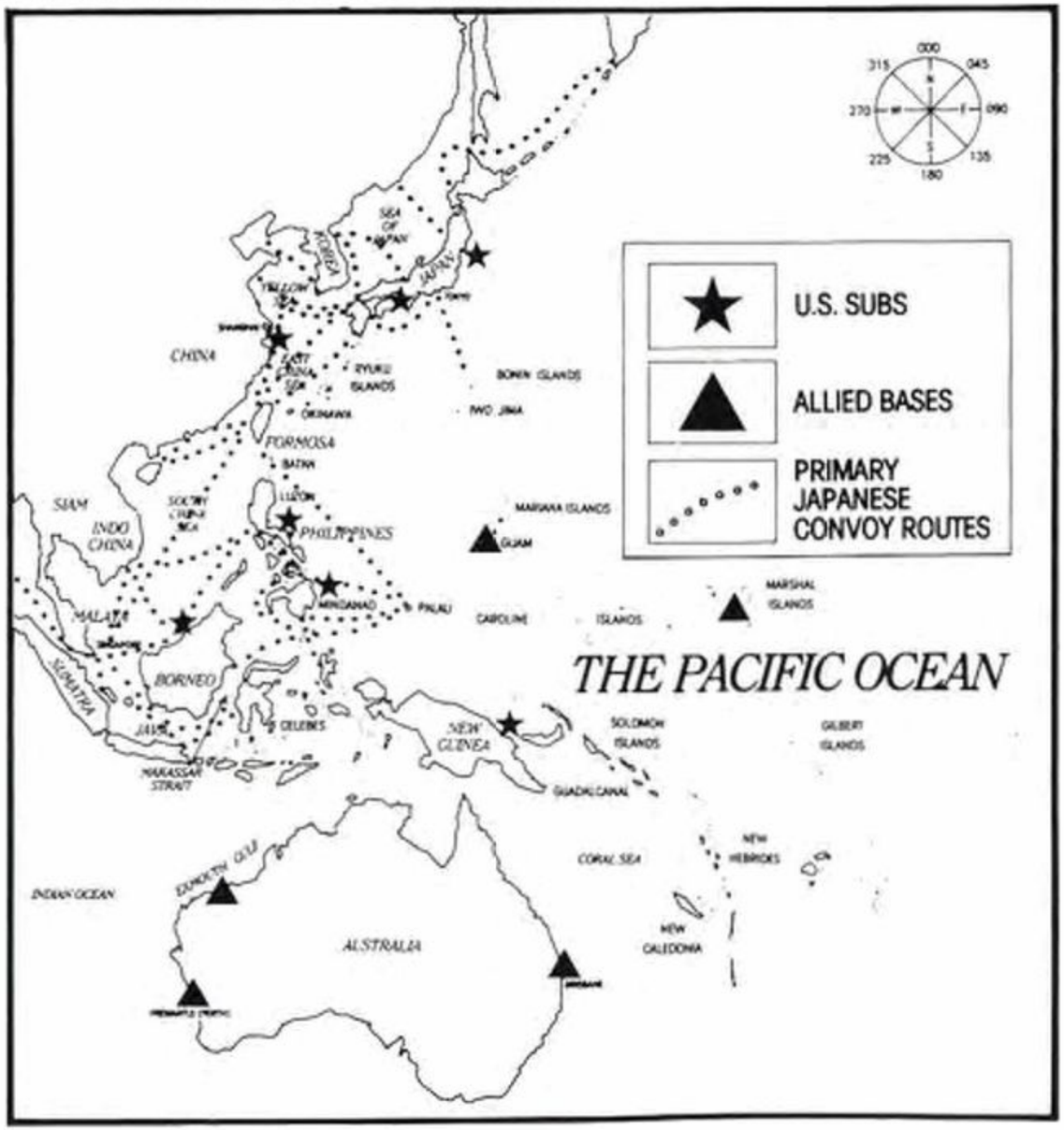


TAUTOG AT NIGHT (Lt. Commander Sieglaff)
Radar/Visual Night
March 16, 1944, Latitude 42-25 N,
Longitude 144-55 E.
Off the eastern coast of Japan, USS Tautog encounters a Japanese convoy. Night attacks depend very much on the prevailing visibility conditions. During poor visibility, a low lying sub can safely close with its target on the surface. If visibility is good, however, more caution is required.



GRAYBACK IN THE CHINA SEA
(Lt. Commander J.A. Moore)
Submerged Radar
October 21, 1944, Latitude 26-48 N,
Longitude 124-56 E.
A very difficult situation. Three radar-equipped escorts are guarding the convoy! Your best hope is a dawn or dusk periscope attack.

WAR PATROL SCENARIOS



The War Patrol scenarios are the true test of a submariner's skill. Your mission is to scour the Japanese convoy lanes, finding, attacking and sinking the maximum tonnage of enemy shipping. You will encounter a wide variety of situations, opportunities and dangers. Note that each submarine is equipped differently—your tactics should take into account the strengths and weaknesses of your sub.

For an overview of Japanese convoy lanes, see the map. All of these convoy lanes are active in scenarios that occur early in the war. As the war progresses, and the area of the Pacific controlled by Japan gradually shrinks, it becomes very difficult to find convoys in areas distant from Japan. In the scenarios that occur later in the war, it is easiest to find targets in the waters around the islands of Japan.

TORPEDOES

Primary submarine armament consisted of six torpedo tubes forward and four tubes aft. A total of 24 torpedoes were carried: 14 forward and 10 aft. A torpedo reload required about 10 minutes.

Most torpedoes were fired at a range of 1,000-3,000 yards. The best torpedo track was one which was perpendicular to the course of the target ship. This provided the largest potential target area. Head-on shots or stern shots were unlikely to hit their targets.

TORPEDO DATA COMPUTER

The TDC, when fed with the target speed, range and course, automatically calculated the correct torpedo track. The captain would often aim slightly ahead or behind the target ship if he expected a particular change in course. Frequently a "spread" of torpedoes was fired by aiming one slightly ahead of the target, one directly at the target and one slightly behind the target.

It was important to make the first set of torpedoes count. Once the torpedo tracks were spotted, the convoy would begin to zig-zag radically and the escorts would charge in on the sub's position.

DECK GUN

The deck gun was effective in sinking badly damaged targets or to slow a ship down and force it to fall behind the convoy. The gun was also used as a last ditch measure by subs which were forced to surface.

ATTENTION COMMANDER: The gun may only be fired when your sub is on the surface. Use the crosshairs on the periscope/binocular screen to aim the gun. The range is automatically set to the TDC range of the target at which you are aiming. Press the player 2 Control Pad UP or DOWN to add or subtract deflection from this range. Example: an 18 knot destroyer coming directly towards you from 4,000 yards away will move over 200 yards in the time it takes the shell to reach the target. Therefore you should press the Control Pad DOWN to select a deflection of −200 to −250 yards before firing the gun. At 2,000 yards the shell will only take half the time to reach the target, so a −100 yard deflection should be used. Your gun is supplied with 80 shells.

JAPANESE CONVOYS

Japanese shipping generally travelled in small convoys of three to seven ships. Convoys consisted of cargo ships, troop ships, tankers and destroyer escorts.

Tankers were the most important target class. The Japanese were critically dependent on the flow of oil to keep the Main Battle Fleet in operation. Troop ships were also important targets. You are more likely to find these valuable ships sailing through the shipping lanes which lead directly to Japan.

Cargo ships represented the majority of Japanese shipping. They hauled supplies and equipment to and from the Japanese homeland.

Escorts came in two classes. Destroyers were often used for escort duty. The Japanese also constructed a special class of escort for anti-submarine defense: the "Kaibokan." This sub killer extraordinair was packed with sophisticated radar and special depth charges. A submarine's best chance against a Kaibokan was to outrun it on the surface, since its top speed was less than 20 knots. Destroyers could steam at close to 30 knots.

Japanese convoy traffic tended to concentrate along the routes between major ports. Refer to the convoy route map on p.18 for details.

SUBMARINE TACTICS

A successful submarine attack was very much a team effort by the entire submarine crew, with the captain making crucial decisions which spelled the difference between success or failure. Carefully weighing the number of escorts, the types of ships, visibility, water depth, number of torpedoes remaining, battery charge, the convoy's course and speed he decided how, when and where to attack the enemy.

With their low surface profile and ability to submerge, stealth and surprise were vital ingredients in all submarine attacks. Once an enemy ship or convoy had been spotted, a successful attack required a well thought out approach to within a few thousand yards of the enemy without being detected.

ESCAPE

If detected by enemy escorts, escape became the sub's main objective. A submarine was no match for even a single destroyer in a gun and ramming duel. The usual tactic was to dive as deeply as possible and rig for silent running. Maintaining a minimum profile and minimum running noise was especially important under these circumstances. A strong temperature gradient could also provide some protection from the enemy's sonar. Leaking fuel or machinery damage made the escort's job easier.

Submarines gained some benefit from their tighter turning circle and ability to constantly track the escorts propeller noises. Under extreme circumstances, a sub might try to convince the attacking destroyers that it had been destroyed by releasing oil and debris which floated to the surface. (Refer to page 8 for this procedure.)

At night the sub's 20 knot surface speed was sometimes sufficient to outrun pursuing escorts.

ADVICE TO THE CAPTAIN

Make sure you understand the role of the Torpedo Data Computer (TDC)—most torpedo shots should be made with the periscope crosshairs directly on your target.

Make sure you understand the distinction between BEARING and HEADING. BEARING is the direction in which your periscope/binoculars are looking. HEADING is the direction your sub is facing. Note that it is generally much faster and easier to aim your torpedoes and gun by rotating the periscope (changing your BEARING) rather than by steering the sub (changing your HEADING).

In general, you should plan on making a submerged attack in daylight, and a surface attack at night. During dawn and dusk you can try both.

Treat Your ULTRAGAMES Cassette Carefully

- This ULTRAGAMES cassette is a precision-crafted device with complex electronic circuitry. Avoid subjecting it to undue shock or extremes of temperature. Never attempt to open or dismantle the cassette.

- Do not touch the terminal leads or allow them to come into contact with water or the game circuitry will be damaged.

- Always make sure your computer is SWITCHED OFF when inserting the cassette or removing it from the computer.

COMPLIANCE WITH FCC REGULATIONS

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures.

— Reorient the receiving antenna
— Relocate the NES with respect to the receiver
— Move the NES away from the receiver
— Plug the NES into a different outlet so that computer and receiver are on different circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: How to Identify and Resolve Radio-TV interference Problems. This booklet is available from the U.S. Government Printing Office, Washington, DC 20402. Stock No. 004-000-00345-4.

SCORES

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